# Mitigation and Monitoring

Fixing a chronic NEPA weakness

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## Why change anything?

- Incomplete or unknown mitigation execution is a chronic NEPA weakness
- Staff must move on to next hot issue after completing a NEPA document
- Incomplete or unknown mitigation execution is a risk to the mission
  - Litigation; delays; cost increases; training impairment
  - Environmental Office blamed

## Army IG report

- Army IG found "no effective system to verify or monitor mitigation..."
- Staff relied on personal memories to follow up mitigation commitments
- Could not identify if proponents where held accountable to implement or monitor mitigation

#### Recommended/Potential Solutions

- Army should develop specific mitigation monitoring procedures
  - Suggested TRADOC's Mitigation Tracking
    System under development at the time
- NEPA management system software
- Use ITAM GIS tools more effectively
- ECAS/EPAS enhancements
- Take advantage of ISO 14001

#### Why do we need EMS?





While existing environmental programs have been adequate to meet regulatory compliance they do not provide an easy system for whole program review and continual improvement.

# Why use ISO 14001?

- Have to do ISO 14001 anyway
  - Not going away
    - Executive Order and Army directive requirement
  - Good business
- International standard
  - International Organization of Standardization (ISO)
- Measurement and monitoring are strengths of ISO 14001

#### What is the directive for EMS?

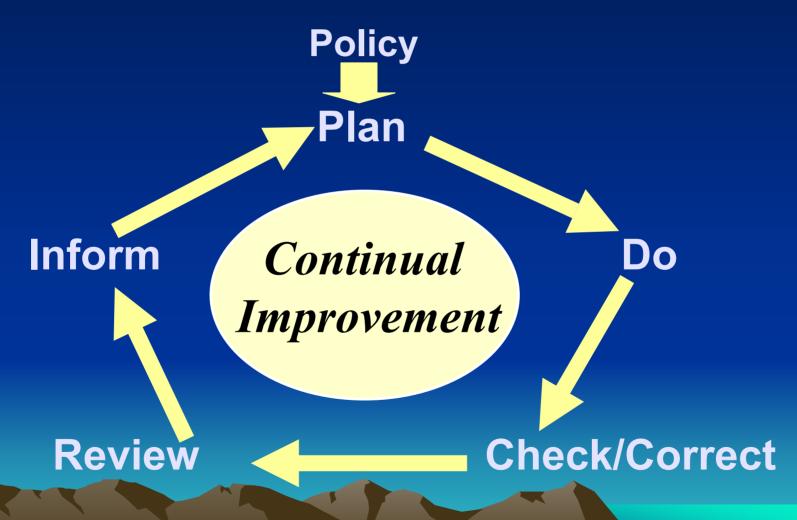


By December 31, 2005, each agency shall implement an EMS at all appropriate agency facilities based on facility size, complexity, and the environmental aspects of facility operations.

### What is ISO 14001 EMS?

- EMS is a management system
  - integrates environmental accountability into daily decision-making and long-term planning processes
  - sets environmental objectives and measurable targets

### ISO 14001 EMS Framework



### ISO 14001 Similar to NEPA

- Both consider views of interested parties
- Both evaluate significant environmental impacts
- Both require informing decision makers

# Differences between NEPA and ISO 14001

#### **NEPA**

- Focuses on proposed actions
- Predicts impacts

Directly involves the public

#### **ISO 14001**

- Focuses on both current and future operations
- Sets targets or environmental performance standards
- Usually involves internal stakeholders

### ISO 14001 elements

- Environmental Policy
- Planning
  - Environmental aspects
  - Legal and other requirements
  - Objectives and targets
  - Environmental mgt programs
- Implementation & Operation
  - Structure & responsibility
  - Training, awareness and competence
  - Communication
  - EMS documentation

- Document control
- Operational control
- Emergency preparedness and response
- Checking & Corrective Action
  - Monitoring & measurement
  - Nonconformance and corrective and preventative action
  - Records
  - EMS audit
- Management Review

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# Checking and Correcting phase

- Monitoring and measurement
- Nonconformance and corrective and preventive action
- Records
- EMS audit

# Where is the monitoring requirement in ISO 14001?



 NEPA mitigation monitoring best done within <u>Checking and</u> <u>Correcting phase</u> of ISO 14001

## Monitoring and Measurement

- "The organization shall establish and maintain documented procedures to monitor and measure, on a regular basis, the key characteristics of its operation and activities that can have a significant impact on the environment."
- NEPA mitigation plans and procedures could be part of this ISO 14001 sub phase.

# Benefits of Using ISO 14001 for NEPA Mitigation Monitoring

- Reduce risk to mission
  - Eliminate NEPA weakness and litigation vulnerabilities
- Gain high visibility via senior management review of mitigation and monitoring results
- Reduce environmental stovepipes
  - EMS is required and is implemented across entire installation
- Increase flexibility to mission/training
  - Some states reduce inspections, fines, etc. for facilities meeting their ISO 14001 requirements
  - Must prove that the EMS is working well

# Example 1: Fort Benning (GA) DMPRC EIS

- Proposed project: build new digital multipurpose range complex
  - Clear over 1000 acres of trees
  - Red-cockaded woodpecker habitat BA
  - Wetlands mitigation
  - Current Zone III noise migrates off installation
- Draft mitigation and monitoring plan will state within DEIS that ISO 14001 EMS will be the management tool to ensure all mitigation is implemented and working as planned.
  - Specific mitigation and monitoring responsibilities should be assigned to individuals/organizations

# Example 2: Monitoring Sustainable Design Construction Projects

- Army's 18 Mar 03 ASA (I&E) policy for all RCI and future MCA (FY06+) meet GOLD standard of sustainable design
- Gold standard designed Army facilities mitigate most environmental effects of construction and operations
- Like a mitigated FNSI or CX, BUT monitoring is essential to ensure:
  - Mitigation is in placed in construction specifications
  - Project managers don't eliminate of mitigation specifications during cost cutting exercises

#### **CEQ Task Force**

- The President's Council on Environmental Quality (CEQ) established a task force in 2002 to improve NEPA efficiency and effectiveness
  - A former Army environmental attorney leads the task force
- Task force is keenly aware of value of integrating ISO 14001 and NEPA
  - Adaptive management is key area of their study
  - ISO 14001 EMS is key element of adaptive management

# ISO 14001 EMS training

- SERO installations
  - Georgia Tech, University of Tennessee,
    University of South Carolina providing training

- 10-week online course
  - University of Denver/University College, ISO
    14001 EMS Standards, 3 graduate credits

## Summary

- Mitigation monitoring is a NEPA weakness
- No effective mitigation monitoring system
- ISO 14001 can fill gap
- Other tools (ITAM/GIS; ECAS/EPAS, etc.) enhance ISO 14001 capabilities
- Using ISO 14001 for tracking mitigation saves money, time, and reduces stovepipes